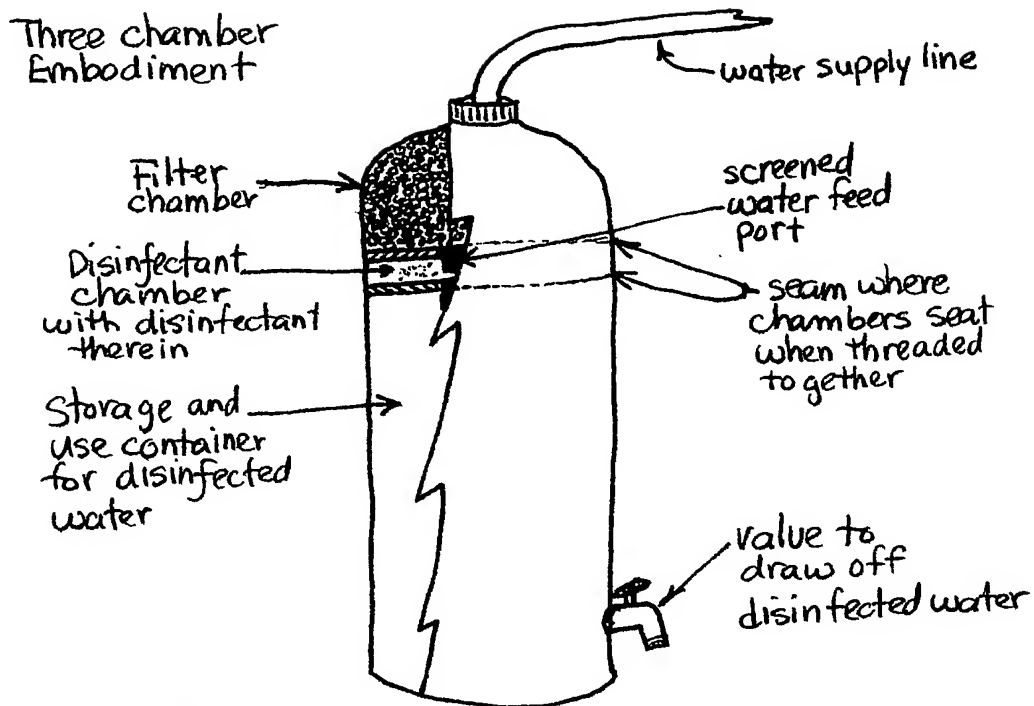
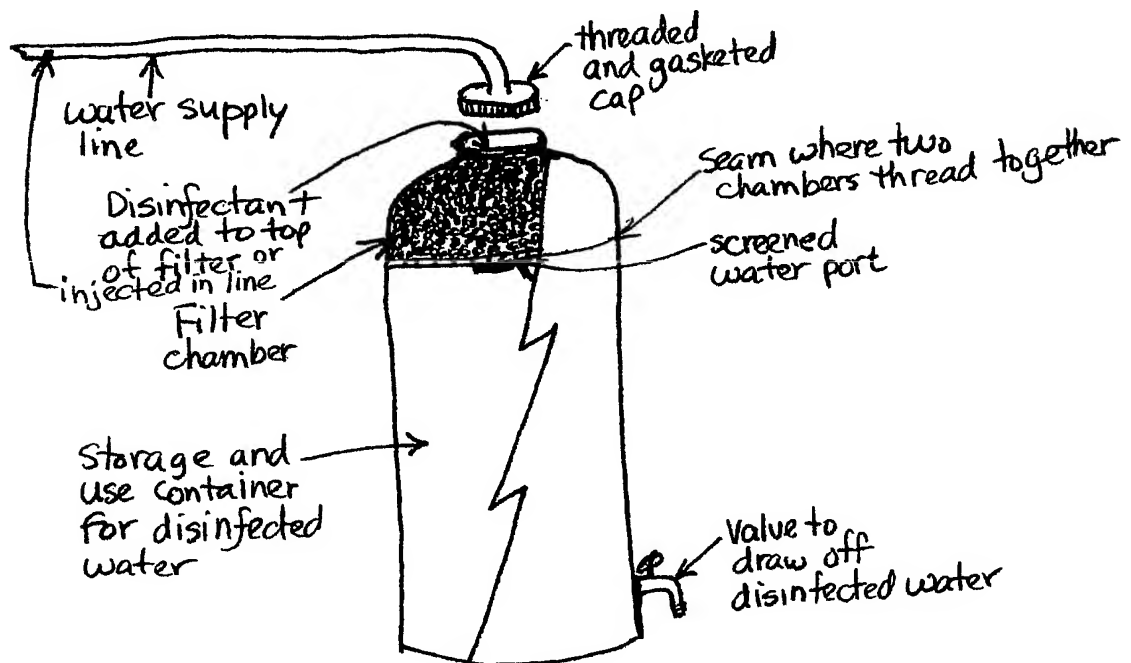


# Figure 1

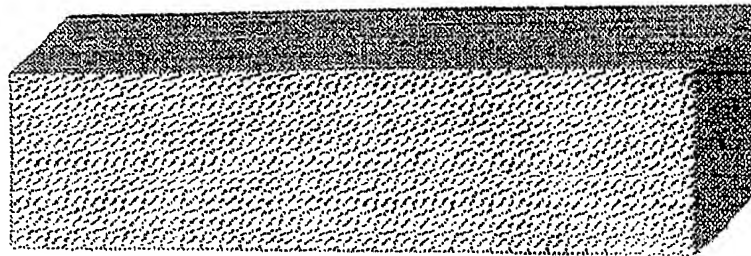


# Figure 2

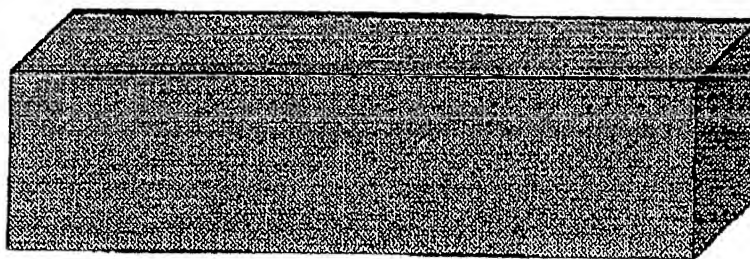
Two Chamber Embodiment



**Figure 3**



**Figure 4**



# MicroPure Technologies - Residual Efficacy Study

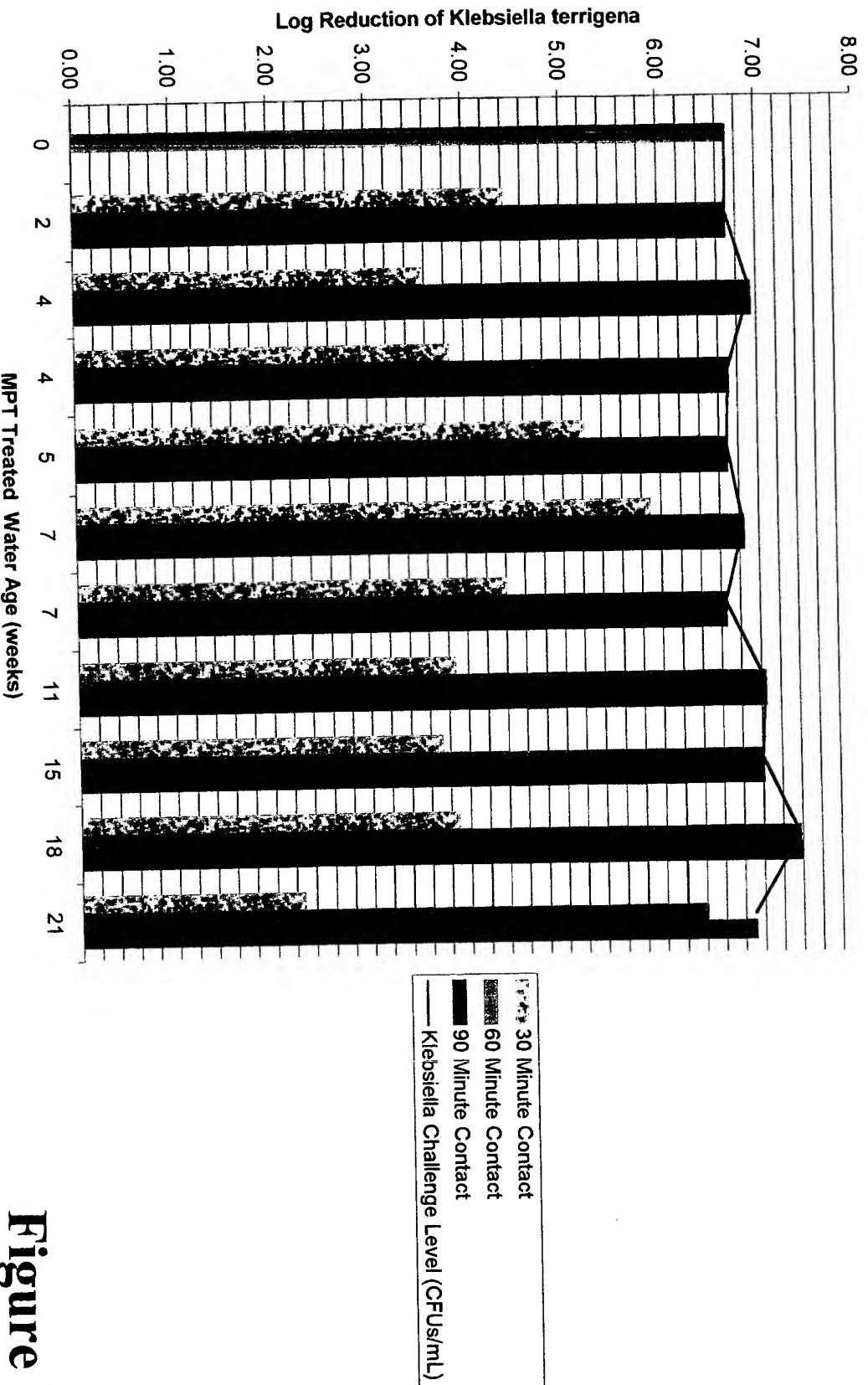


Figure 5

Filename: Residual Study Summary Version1.xls  
 Filedate: August 8, 2003

# Figure 6A

Results in Scientific Notation:  
 No results excluded

Klebsiella terrigena							
Run Results - CFUs/mL by contact time (min)							
Run Date	MPT "age" (weeks)	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
31-Mar-03	0	10	2	5.0 x 10 <sup>6</sup>		0	
			3			0	
15-Apr-03	2	13	4	4.9 x 10 <sup>6</sup>	2.5 x 10 <sup>2</sup>	0	0
			5		1.4 x 10 <sup>2</sup>	0	0
30-Apr-03	4	15	4	8.7 x 10 <sup>6</sup>	2.4 x 10 <sup>3</sup>	0	0
			5		2.3 x 10 <sup>3</sup>	0	0
2-May-03	4	16	4	5.0 x 10 <sup>6</sup>	9.9 x 10 <sup>1</sup>	0	0
			5		5.3 x 10 <sup>3</sup>	0	0
6-May-03	5	17	4	4.8 x 10 <sup>6</sup>	4	0	0
			5		2.1 x 10 <sup>2</sup>	5.4 x 10 <sup>1</sup>	0
20-May-03	7	20	4	6.9 x 10 <sup>6</sup>	1	0	0
			5		8.4 x 10 <sup>1</sup>	0	0
29-May-03	7	21	4	4.5 x 10 <sup>6</sup>	1.4 x 10 <sup>2</sup>	0	0
			5		2.3 x 10 <sup>2</sup>	0	0
17-Jun-03	11	22	4	1.1 x 10 <sup>7</sup>	8.5 x 10 <sup>2</sup>	0	0
			5		2.7 x 10 <sup>3</sup>	0	0
15-Jul-03	15	24	4	1.0 x 10 <sup>7</sup>	8.6 x 10 <sup>2</sup>	0	0
			5		4.4 x 10 <sup>3</sup>	1	0
7-Aug-03	18	29	6	1.2 x 10 <sup>7</sup>	8.7 x 10 <sup>2</sup>	2.0 x 10 <sup>1</sup>	0
			7	2.4 x 10 <sup>7</sup>	3.0 x 10 <sup>3</sup>	1	0
25-Aug-03	21	32	5	8.0 x 10 <sup>6</sup>	6.1 x 10 <sup>4</sup>	8	0
			6		2.9 x 10 <sup>4</sup>	0	0

Note: 7 Aug 03 sample #7 was challenged at 2X dose of #6 sample

Results in Number Format  
 No results excluded

Klebsiella terrigena							
Run Results - CFUs/mL by contact time (min)							
Run Date	MPT "age" (weeks)	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
15-Apr-03	2	13	4	4,900,000	250	0	0
			5		140	0	0
30-Apr-03	4	15	4	8,700,000	2,400	0	0
			5		2,300	0	0
2-May-03	4	16	4	5,000,000	99	0	0
			5		5,300	0	0
6-May-03	5	17	4	4,800,000	4	0	0
			5		210	54	0
20-May-03	7	20	4	6,900,000	1	0	0
			5		84	0	0
29-May-03	7	21	4	4,500,000	140	0	0
			5		230	0	0
17-Jun-03	11	22	4	11,000,000	850	0	0
			5		2,700	0	0
15-Jul-03	15	24	4	10,000,000	860	0	0
			5		4,400	1	0
7-Aug-03	18	29	6	12,000,000	870	20	0
			7	24,000,000	3,000	1	0
25-Aug-03	21	32	5	8,000,000	61,000	8	0
			6		29,000	0	0

Note: 7 Aug 03 sample #7 was challenged at 2X dose of #6 sample

Results in Log Format  
 No results excluded

Klebsiella terrigena							
Run Results - CFUs/mL by contact time (min)							
Run Date	MPT "age" (weeks)	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
31-Mar-03	0	10	2	6.70		0.0	
			3	6.70		0.0	
15-Apr-03	2	13	4	6.69	2.40	0.0	0.0
			5	6.69	2.15	0.0	0.0
30-Apr-03	4	15	4	6.94	3.38	0.0	0.0
			5	6.94	3.36	0.0	0.0
2-May-03	4	16	4	6.70	2.00	0.0	0.0
			5	6.70	3.72	0.0	0.0
6-May-03	5	17	4	6.68	0.60	0.0	0.0
			5	6.68	2.32	1.73	0.0
20-May-03	7	20	4	6.84	0.00	0.0	0.0
			5	6.84	1.92	0.0	0.0
29-May-03	7	21	4	6.65	2.15	0.0	0.0
			5	6.65	2.36	0.0	0.0
17-Jun-03	11	22	4	7.04	2.93	0.0	0.0
			5	7.04	3.43	0.0	0.0

# Figure 6B

15-Jul-03	15	24	4	7.00	2.93	0.0	0.0
			5	7.00	3.64	0.00	0.0
7-Aug-03	18	29	6	7.08	2.94	1.30	0.0
			7	7.38	3.48	0.00	0.0
25-Aug-03	21	32	5	6.90	4.79	0.90	0.0
			6	6.90	4.46	0.0	0.0

Note: 7 Aug 03 sample #7 was challenged at 2X dose of #6 sample  
 Note: For log value, a "1" is reported as 0.00 and a "0" is reported as 0.0 and will be indicated as ">" in log reductions

Makeup Water: CWD finished water, carbon filter, 1 micron nominal filtration, UV.  
 Water Chemistry: - 3/31/03 (pre MPT addition)  
     pH - 7.15  
     Turb - 0.19  
     Temp - 22.0  
     5/29/03 (MPT in water)  
     pH - 7.84  
     Turb - 0.57 NTU  
     Temp - 21.5 °C  
     TDS - 132.5  
     Conductivity - 199.8 micromhos/cm  
     Total Chlorine - <0.03 mg/L  
     TDS - 144.6 mg/L  
     Conductivity - 217 micromhos/cm  
     Total Chlorine - <0.03 mg/L

Log Reductions  
 No Results Excluded

Klebsiella terrigena							
Run Results - CFUs/mL by contact time (min)							
Run Date	MPT "age" (weeks)	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
31-Mar-03	0	10	2	6.70		6.70	
			3	6.70		6.70	
15-Apr-03	2	13	4	6.69	4.29	6.69	6.69
			5	6.69	4.54	6.69	6.69
30-Apr-03	4	15	4	6.94	3.56	6.94	6.94
			5	6.94	3.58	6.94	6.94
2-May-03	4	16	4	6.70	4.70	6.70	6.70
			5	6.70	2.98	6.70	6.70
6-May-03	5	17	4	6.68	6.08	6.68	6.68
			5	6.68	4.36	4.95	6.68
20-May-03	7	20	4	6.84	6.84	6.84	6.84
			5	6.84	4.92	6.84	6.84
29-May-03	7	21	4	6.65	4.50	6.65	6.65
			5	6.65	4.29	6.65	6.65
17-Jun-03	11	22	4	7.04	4.11	7.04	7.04
			5	7.04	3.61	7.04	7.04
15-Jul-03	15	24	4	7.00	4.07	7.00	7.00
			5	7.00	3.36	7.00	7.00
7-Aug-03	18	29	6	7.08	4.14	5.78	7.08
			7	7.38	3.90	7.38	7.38
25-Aug-03	21	32	5	6.90	2.11	6.00	6.90
			6	6.90	2.44	6.90	6.90

Note: 7 Aug 03 sample #7 was challenged at 2X dose of #6 sample

Results in Log Format  
 May 6 and Aug 7 "flyer" results at 60 minutes excluded

Klebsiella terrigena							
Run Results - CFUs/mL by contact time (min)							
Run Date	MPT "age" (weeks)	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
31-Mar-03	0	10	2	6.70		0.0	
			3	6.70		0.0	
15-Apr-03	2	13	4	6.69	2.40	0.0	0.0
			5	6.69	2.15	0.0	0.0
30-Apr-03	4	15	4	6.94	3.38	0.0	0.0
			5	6.94	3.36	0.0	0.0
2-May-03	4	16	4	6.70	2.00	0.0	0.0
			5	6.70	3.72	0.0	0.0
6-May-03	5	17	4	6.68	0.60	0.0	0.0
			5	6.68	2.32		0.0
20-May-03	7	20	4	6.84	0.00	0.0	0.0
			5	6.84	1.92	0.0	0.0
29-May-03	7	21	4	6.65	2.15	0.0	0.0
			5	6.65	2.36	0.0	0.0
17-Jun-03	11	22	4	7.04	2.93	0.0	0.0
			5	7.04	3.43	0.0	0.0
15-Jul-03	15	24	4	7.00	2.93	0.0	0.0
			5	7.00	3.64	0.00	0.0
7-Aug-03	18	29	6	7.08	2.94		0.0
			7	7.38	3.48	0.00	0.0
25-Aug-03	21	32	5	6.90	4.79	0.90	0.00
			6	6.90	4.46	0.00	0.00

### Figure 6C

Log Reductions by Contact Time (minutes)				Klebsiella terrigena			
Run Date	MPT "age" (weeks)	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
31-Mar-03	0	10	2	6.70		6.70	
			3	6.70		6.70	
15-Apr-03	2	13	4	6.69	4.29	6.69	6.69
			5	6.69	4.54	6.69	6.69
30-Apr-03	4	15	4	6.94	3.56	6.94	6.94
			5	6.94	3.58	6.94	6.94
2-May-03	4	16	4	6.70	4.70	6.70	6.70
			5	6.70	2.98	6.70	6.70
6-May-03	5	17	4	6.68	6.08	6.68	6.68
			5	6.68	4.38		6.68
20-May-03	7	20	4	6.84	6.84	6.84	6.84
			5	6.84	4.92	6.84	6.84
29-May-03	7	21	4	6.65	4.50	6.65	6.65
			5	6.65	4.29	6.65	6.65
17-Jun-03	11	22	4	7.04	4.11	7.04	7.04
			5	7.04	3.61	7.04	7.04
15-Jul-03	15	24	4	7.00	4.07	7.00	7.00
			5	7.00	3.36	7.00	7.00
7-Aug-03	18	29	6	7.08	4.14		7.08
			7	7.38	3.90	7.38	7.38
25-Aug-03	21	32	5	6.90	2.11	6.00	6.90
			6	6.90	2.44	6.90	6.90

[illegible]

31-Mar-03		6.7		6.7	0
15-Apr-03	4.415	6.69	6.69	6.69	2
30-Apr-03	3.57	6.94	6.94	6.94	4
2-May-03	3.84	6.7	6.7	6.7	4
6-May-03	5.22	6.68	6.68	6.68	5
20-May-03	5.88	6.84	6.84	6.84	7
29-May-03	4.395	6.65	6.65	6.65	7
17-Jun-03	3.86	7.04	7.04	7.04	11
15-Jul-03	3.715	7	7	7	15
7-Aug-03	3.87	7.38	7.38	7.38	18
25-Aug-03	2.275	6.4	6.9	6.9	21

# MicroPure Technologies - Repetitive Challenge Study

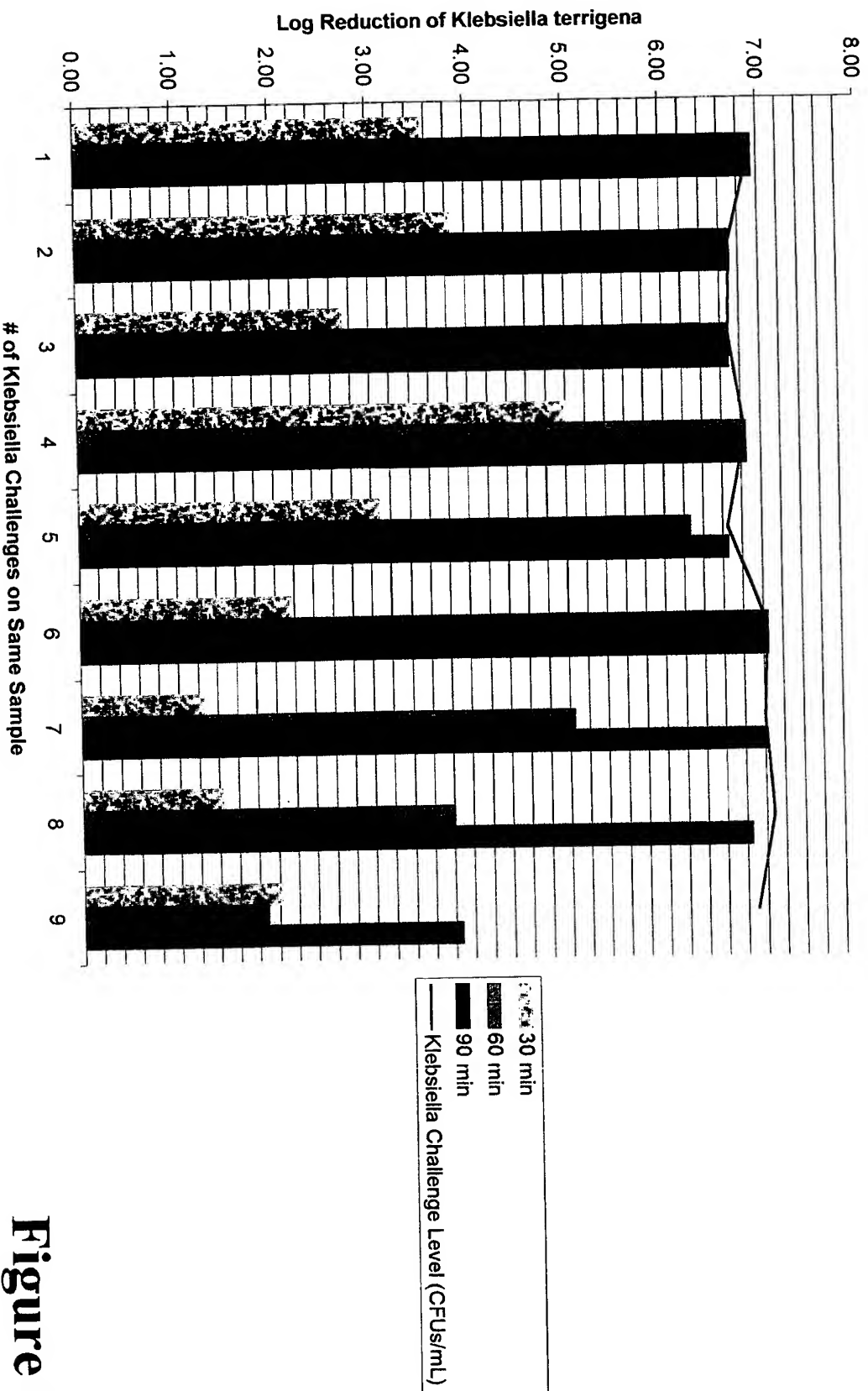


Figure 7

[illegible][illegible]

				<i>Klebsiella terrigena</i>			
				Run Results - CFUs/mL by contact time (min)			
Run Date	# Of Inoculations	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
30-Apr-03	1	15	4	6.94	3.38	0.0	0.0
			5	6.94	3.36	0.0	0.0
2-May-03	2	16	4	6.70	2.00	0.0	0.0
			5	6.70	3.72	0.0	0.0
6-May-03	3	17	6	6.68	4.20	0.0	0.0
			7	6.68	3.72	0.0	0.0
20-May-03	4	20	6	6.84	1.70	0.0	0.0
			7	6.84	2.00	1.26	0.0
29-May-03	5	21	6	6.65	5.15	0.30	0.0

			7	6.65	2.00	0.48	0.00
17-Jun-03	6	22	6	7.04	4.62	0.0	0.00
			7	7.04	5.15	0.00	0.0
15-Jul-03	7	24	6	7.00	5.85	2.00	0.0
			7	7.00	5.66	1.91	0.0
7-Aug-03	8	29	6	7.08	5.63	3.18	0.48
			7	7.08	5.68	3.38	0.00
25-Aug-03	9	32	5	6.90	4.88	4.83	3.30
			6	6.90	-	5.20	2.79

1.72  
0.00

Log Reductions

Excluded May 20, T60 result - apparent plate contamination on Sample #7

Klebsiella terrigena							
Log Reductions by Contact Time (minutes)							
Run Date	# Of Inoculations	MPT Run #	Sample #	Challenge Dose	T30	T60	T90
30-Apr-03	1	15	4	6.94	3.56	6.94	6.94
			5	6.94	3.58	6.94	6.94
2-May-03	2	16	4	6.70	4.70	6.70	6.70
			5	6.70	2.98	6.70	6.70
6-May-03	3	17	6	6.68	2.48	6.68	6.68
			7	6.68	2.96	6.68	6.68
20-May-03	4	20	6	6.84	5.14	6.84	6.84
			7	6.84	4.84		6.84
29-May-03	5	21	6	6.65	1.50	6.35	6.65
			7	6.65	4.65	6.17	6.65
17-Jun-03	6	22	6	7.04	2.42	7.04	7.04
			7	7.04	1.89	7.04	7.04
15-Jul-03	7	24	6	7.00	1.15	5.00	7.00
			7	7.00	1.34	5.09	7.00
7-Aug-03	8	29	6	7.08	1.45	3.90	6.60
			7	7.08	1.40	3.70	7.08
25-Aug-03	9	32	5	6.90	2.02	2.07	3.60
			6	6.90		1.70	4.11

T120

5.18  
6.90

Graph values

May 20 sample #7 result excluded

	30 min	60 min	90 min	challenge level
30-Apr-03	3.56	6.94	6.94	6.94
	3.58	6.94	6.94	6.94
2-May-03	4.70	6.70	6.70	6.70
	2.98	6.70	6.70	6.70
6-May-03	2.48	6.68	6.68	6.68
	2.96	6.68	6.68	6.68
20-May-03	5.14	6.84	6.84	6.84
	4.84		6.84	6.84
29-May-03	1.50	6.35	6.65	6.65
	4.65	6.17	6.65	6.65
17-Jun-03	2.42	7.04	7.04	7.04
	1.89	7.04	7.04	7.04
15-Jul-03	1.15	5.00	7.00	7.00
	1.34	5.09	7.00	7.00
7-Aug-03	1.45	3.90	6.60	7.08
	1.40	3.70	7.08	7.08
25-Aug-03	2.02	2.07	3.60	6.90
		1.70	4.11	6.90

Average values - 1 per date - for graphing Chart 1

	30 min	60 min	90 min	challenge level
30-Apr-03	3.57	6.94	6.94	6.94

# of Kleb Challenges  
1

**Figure 8B**

2-May-03	3.84	6.70	6.70	6.70
6-May-03	2.72	6.68	6.68	6.68
20-May-03	4.99	6.84	6.84	6.84
29-May-03	3.08	6.26	6.65	6.65
17-Jun-03	2.16	7.04	7.04	7.04
15-Jul-03	1.25	5.05	7.00	7.00
7-Aug-03	1.43	3.80	6.84	7.08
25-Aug-03	2.02	1.88	3.86	6.90

2  
3  
4  
5  
6  
7  
8  
9|

**Figure 8C**